



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 9, 2001

Mr. Richard Mach
Department of the Navy
Naval Facilities Engineering Command
Southwest Division
BRAC Office
1220 Pacific Highway
San Diego, CA 92132-5190

Re: EPA review and comment on the Work Plans for the Excavation of Impacted Soil and Closure of Abandoned Steam and Fuel Pipelines, Hunters Point Shipyard, dated March 5, 2001

Dear Mr. Mach:

EPA has completed its review of the above-referenced document. Comments are provided in an attachment to this letter.

If you have any questions, please contact me at 415-744-2409.

Sincerely,

A handwritten signature in cursive script, which appears to read "Claire", is written over a horizontal line.

Claire Trombadore
Remedial Project Manager

cc: Dave Demars, Navy
Mike Wanta, TtEMI
Chein Kao, DTSC
Brad Job, RWQCB
Amy Brownell, City of SF
John Chester, City of SF
Michael Work, EPA
Indira Balkisoon, TechLaw

EPA Review and Comment
Work Plans for Excavation of Impacted Soil and
Closure of Abandoned Steam and Fuel Pipelines
Hunters Point Shipyard

- 1) The Work Plans do not adequately describe the specific wipe sampling procedures. The Work Plans should state how many wipe samples will be collected per length of pipe, how representativeness of the sample will be assured, how the locations of the wipe samples will be documented (can locations be shown on a map or can photographs be taken), etc. Please include more information about the details of the wipe sampling effort and why the Navy wants to include it in its pipeline sampling protocol.
- 2) **Section 3.1.5, Air Monitoring:** The Department of the Navy (Navy) indicates that air monitoring will take place for VOC and dust using a Photoionization Detector (PID) and an MIE Inc., Portable Real-Time Aerosol Monitor. As some of the contaminants of concern are petroleum products, which likely will not be detectable using a PID, has the Navy considered air monitoring with an Explosivity/Oxygen monitor in locations where explosive gases could accumulate or where an oxygen deficient atmosphere could occur. Please revise the Work Plan to incorporate air monitoring using an Explosivity/Oxygen monitor at sites where such monitoring would be warranted, e.g., in the utility corridors. Section 5.3, Pipeline Cleaning Procedures, requires the use of an explosivity meter.
- 2) **Section 3.6, Site Restoration:** The Navy indicates that it will backfill trenches to 90% (of the maximum dry density presumably) as determined using the methodology of ASTM Method D-1557. Is this method applicable to the likely materials to be used for trench backfill at Hunters Point (cement slurry, sands)? Please clarify.
- 3) **Section 5.3, Pipeline Cleaning Procedures.** Please provide additional clarification. Is it really appropriate to close pipelines in place without removing the residual liquids or rinsing the pipes? If residual liquids are present, isn't it prudent to remove them and rinse the pipe and then determine whether to do more (cleaning or removal) if sampling thereafter confirms that residual contamination is present. Is the Navy assuming that any residual liquids that do not contain contaminants above certain criteria (e.g., STLC or TCLP) are safe and that in the case of the steam lines - just water? What about the fuel lines? If there are residual liquids in fuel lines can't one assume it's probably TPH, remove the liquids, rinse the pipes and then take samples (e.g., wipe samples) to confirm there is no residual contamination? Has the RWQCB approved of closing pipelines in place even if residual liquids are present? Also, shouldn't the steps presented on pages 5-1 to 5-3 be separated into what to do if it's a steam line versus what steps apply if it is a fuel line? It would seem that it would make a difference. The steps as written apply to either type of line which does not seem to make sense. While EPA may agree that it is prudent to investigate the fuel and potentially contaminated steam pipe lines before deciding to dig them up, the approach outlined in Section 5.3 appears to need additional clarification.

- 4) **Section 5.3, Pipeline Cleaning Procedures. Step 6.** Please explain why it is appropriate to screen pipeline sample results against the STLC and TCLP. It seems it would be more appropriate to evaluate next steps for every sample for which there is a detection of potential COCs. Further, the BCT should come to agreement on the appropriate detection limits to use and include them in the work plans. What are the pipelines made of - metal, ceramic? The pipeline material would be a factor to consider prior to determining pipeline cleaning or removal as an appropriate next step.
- 5) **Section 5.6, Evidence of a Release Within a Utilidor:** The Navy indicates that if a release was contained within the utilidor, the utilidor would be remediated. There is no reason to believe that the utilidors were designed to be secondary containments. In fact, good design practice may have required that the utilidors not be secondary containments to prevent them from flooding during rainfall events and also to prevent them from being floated out of the ground by rising groundwater levels. Please revise the Work Plans to indicate that if sampling indicates that the spills within the utilidors contained CERCLA contaminants of concern, that the soils beneath the utilidors will be investigated to determine if they have been impacted. Alternatively, please show that the utilidors served as adequate secondary containment to prevent the release of contaminants to the subsurface.
- 6) **Appendix A, Section 3.7, Wastewater Sampling and Analysis:** This section of the FSP contains a long list of potential analyses that might be conducted on wastewater samples. The FSP indicates that the wastewater samples will be analyzed for any or all of the parameters. Since the FSP should be site- and action-specific, the analytical suite should be specified. To make this FSP useful to the field personnel performing the work, please specify which analytic methods are to be used or provide rules to be used by field personnel to determine which methods are to be specified.
- 7) **Appendix A, Section 4.2, Field Quality Control Samples:** The FSP states that duplicate wipe samples will be collected, but does not specify a frequency. Please revise the FSP to include a table providing field personnel with specific instructions for collecting duplicate environmental samples.

The FSP does not mention collecting soil duplicate samples or duplicate samples of pipe residuals. Please clarify.

The FSP indicates that matrix spike/matrix spike duplicate (MS/MSD) samples will not be collected, but that the laboratory QC package will contain MS/MSD information. However, the laboratory MS/MSD data will not be helpful in determining if the hazardous constituents to be analyzed for in the pipeline residual materials as this is a specific matrix that is unlikely to be similar to the laboratory MS/MSD matrix. Please clarify.

- 8) **Appendix A, Section 5.1, Wipe Sample Collection Procedure:** Wipe sampling for hydrophobic compounds (petroleum products, VOC, PCBs) should not be conducted using water soaked filter paper as proposed in the FSP. A wipe test for PCB samples has been promulgated (see 40 CFR 761.123). According to 40 CFR 761.123, the standard

wipe test for spills of high-concentration PCBs on solid surfaces involves sampling using a standard wipe test protocol and comparing the results to pre-determined numerical standards. Is the Navy familiar with this standard and was it considered for use at HPS? The standard also includes the minimum requirements for an appropriate wipe testing protocol. A standard-size template (10 centimeters (cm) x 10 cm) is to be used to delineate the area of cleanup; the wiping medium is a gauze pad or glass wool of known size which has been saturated with hexane. It is important that wipe sampling be performed very quickly after the hexane is exposed to air.

- 9) **Appendix A, Section 5.0, Sampling Method Requirements:** The FSP does not provide sampling methodology for the groundwater sampling activities. For completeness, please provide the groundwater sampling methodology in the FSP.
- 10) **Figures.** Please include a map of the steam and fuel pipelines. EPA's contractor received a copy of such a map during a recent field oversight visit. However, no such map is included in the work plans.
- 13) **Appendix B - Quality Assurance Project Plan (QAPjP), Section 3.0, Quality Assurance Objectives:** This section provides a general description of data quality measures, and in fact does not mention Hunter's Point except in Table 1, Summary of Data Quality Objectives - Closure of Abandoned Steam and Fuel Pipelines at the Hunter's Point Shipyard, San Francisco, CA. Data acceptability criteria are listed without any reference to the rationale for or the source of the criteria. Furthermore, the discussions in this section do not recognize data quality issues associated with the sampling and analyses of oil mixtures or with wipe samples. Please revise this section to include a discussion of data quality issues associated with the sampling and analysis of oil mixtures and wipe samples.
- 14) **Appendix B, QAPjP, Section 3.1.1, page 3-1:** This section states that DQOs are listed in the "... parent QAPP included with the Parcel C SAP (TtEMI, 2001) and the site-specific Field Sampling Plan and QAPP in the addenda to the General Work Plan ...". Given that the plan under current review pertains to remediation (decontamination) and closure of the pipeline system, this section should clearly state or at least summarize the DQOs and numerical cleanup criteria.
- 15) **Appendix B, QAPjP, Section 3.1.1, page 3-1:** The second sentence states that "Contractors tasked with performing these activities will comply with the intent and objectives of the procedures in the parcel C SAP, but are expected to use their own internal equivalent procedures". What does this mean? Please clarify.
- 16) **Appendix B, QAPjP, Section 3.2.1, page 3-2:** The LCD and MSD are not defined in the sections that follow. The LCD is presumably a duplicate of the LCS, and the MSD is presumably the usual matrix spike duplicate. Please revise the text to define LCD and MSD.
- 17) **Appendix B, QAPjP, Table 1.** This table presents elements of the seven step DQO

process applied to the closure of the pipelines. This table is a good summary of the decision and design considerations, and would benefit by having cross references to appropriate sections of the text. Comments on specific elements are provided below.

Step 2, second bullet: The use of water-wet filter paper to obtain wipe samples of oily material would appear to be problematic to obtain samples that will provide quality data. As noted elsewhere, the use of a water-wet paper to obtain a wipe sample of an oily matrix is not logical. Filter paper is typically not pliable, and may not give good or reproducible contact with the surface to be sampled. Additionally, filter papers are typically very thin and designed not to retain fluids, so that the actual amount of water available to extract a chemical is minimal - and probably variable among sampling events. Some filter “papers” are actually polymer-based and are not designed to be particularly good sorbents of aqueous or organic fluids.

Step 2, third bullet: Please describe the criteria and documentation procedures the field personnel will use in making the field observations. Will a check list be employed, and will video tapes be recorded, and will the observations be detailed in reports? This information will be especially critical if a judgmental sampling design is implemented to demonstrate cleanup criteria have been met.

Step 7, second bullet: This bullet states “The locations of the wipe and residual fluid samples will be selected to yield the maximum amount of information possible for the level of effort required”. Please elaborate.